

**REPRESENTATION OF CONTINGENT A PRIORI.** Another application of two-dimensional semantics is in representing of contingent a priori statements. Consider an earlier example:

Julius is the inventor of the zip. (13-1)

Here we say that the name ‘Julius’ is used in such a way as to refer to whoever in fact invented the zip. But whoever in fact, in the actual world  $u$ , invented the zip might not have invented the zip under other circumstances  $v$ . Hence (13-1) is contingent.

JZ	$u$	$v$	$w$
$u$	1	0	0
$v$	0	1	1
$w$	0	1	1

Table 1: ‘Julius is the inventor of the zip’

On the other hand, consider that other world  $v$ . If  $v$  is considered *as the actual world*, then there the name ‘Julius’ is again used with the same stipulation as in  $u$ —though but it refers to a different individual. Hence  $\delta_{uu} = \delta_{vv} = 1$ . In general we get the diagonal proposition necessary across every world (see Table 1).

*Question 1.* Is the same person invented the zip in  $v$  and  $w$  in Table 1?

As before, we can diagonalise the proposition (13-1). Intuitively, the resulting  $\dagger JZ$  is what we assert by uttering (13-1). In the propositional concept for  $\dagger JZ$ ,  $\delta_{ij} = 1$  for every  $i, j$ .

Finally, sometimes we want to make a comment about apriority, e.g., when we say that a certain proposition is knowable a priori. If the propositional concept of the original proposition was  $M$ , then the matrix for this proposition is  $\Box \dagger M$ . Here is the rationale for this operator. Consider then this statement:

‘Julius is the inventor of the zip’ is a priori true. (13-2)

Filling in the cells in its propositional concept, what is the value of  $\delta_{uv}$ ? Evidently the original proposition is a priori true in every possible circumstance. Hence in this instance  $\dagger M = \Box \dagger M$ . But then consider the following:

‘Judson is the inventor of the zip’ is a priori true. (13-3)

Here  $M = \dagger M$ , but  $\dagger M \neq \Box \dagger M$ .

JudZ	$u$	$v$	$w$
$u$	1	0	1
$v$	1	0	1
$w$	1	0	1

Table 2: ‘Judson is the inventor of the zip’

$\Box \dagger \text{JudZ}$	$u$	$v$	$w$
$u$	0	0	0
$v$	0	0	0
$w$	0	0	0

Table 3: “‘Judson is the inventor of the zip’ is a priori true.”

*Remark 2.* In later work Stalnaker repudiates this account of a priori representation. (Details...)

**NEGATIVE EXISTENTIALS.** Diagonalisation helps in the case of true negative existentials. When I say of the fictional character that he (it) does not exist, I am uttering a necessarily true statement. Yet with different presuppositions about how the name refers, different propositions will be associated with the utterance by different speakers. Suppose we examine the claim:

Sherlock Holmes does not exist. (13-4)

Suppose that we have our actual world; then there is a world where Holmes is a detective of whom Conan Doyle wrote a historical account; and then there is a world where a detective named ‘Sherlock Holmes’ wrote memoirs of his adventures under the pseudonym ‘Conan Doyle’. Accordingly we get:

SH	$u$	$v$	$w$
$u$	1	1	1
$v$	1	0	1
$w$	0	0	0

Table 4: ‘Sherlock Holmes does not exist’

$\dagger \text{SH}$	$u$	$v$	$w$
$u$	1	0	0
$v$	1	0	0
$w$	1	0	0

Table 5: ‘Sherlock Holmes does not exist’ diagonalised